

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YASUHISA TAKEKAWA

Appeal No. 97-0802
Application 08/414,112¹

ON BRIEF

Before THOMAS, KRASS, and BARRETT, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

¹ Application for patent filed March 31, 1995, entitled "Mobile Telephone Equipment With Head-Up Display," which claims the foreign filing priority benefit under 35 U.S.C. § 119 of Japanese Application 6-099792, filed May 13, 1994.

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DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-7.

We reverse.

BACKGROUND

The invention is directed to mobile telephone equipment with a head-up display and including a transparent touch panel.

Claim 1 is reproduced below.

1. A mobile telephone equipment for use in an automobile having a front windshield, comprising:

an antenna for transmitting and receiving radio waves;

a main unit having a transmitter, a receiver, and a first controller, said transmitter and said receiver being connected to said antenna;

a handset having a speaker, a microphone, and a second controller, said second controller being connected to said speaker, said microphone, and said first controller;

a display unit having a head-up display for displaying communications information and telephone push buttons in a superimposed relation to a front view outside of the front windshield; and

a transparent touch panel formed on the front windshield in a pattern corresponding to the displayed telephone push buttons.

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The Examiner relies on the admitted prior art in Appellant's figure 4 and specification, pages 1-2, and the following prior art patents:

Ellis	3,956,745	May 11, 1976
Moss	4,818,048	April 4,
1989		

Claims 1-7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Moss in view of the admitted prior art and Ellis.

We refer to the Examiner's Answer (Paper No. 13) (pages referred to as "EA__") for a statement of the Examiner's position and to the Appeal Brief (Paper No. 12) (pages referred to as "Br__") and the Reply Brief (Paper No. 14) (pages referred to as "RBr__") for a statement of Appellant's arguments thereagainst.

OPINION

Grouping of claims

The Examiner erred in stating that Appellant failed to provide reasons in support of the separate patentability of claim 5 for the reasons stated by Appellant (RBr1-2). However, since the rejection of claim 1 is reversed, the

Examiner's failure to address claim 5 does not affect this decision.

Obviousness

Moss is directed to a holographic head-up display panel "to allow an operator such as a pilot or driver to look at a complex control panel on a head-up display and to see his own inputs on that panel, as relayed from a tactile or other sensor on the panel" (col. 1, lines 27-31). Figure 9 is closest to Appellant's invention because it has an illuminated transmission hologram 73 which projects a virtual image keyboard beyond the windshield 12, instead of having an edge-illuminated, multiple layer hologram 11 affixed to the windshield as in figures 1 and 2. The keyboard arrangements are shown in figures 7 and 8. A second hologram 77 in figure 9 focusses a dot on the virtual image 71 of the keys 61-67 and 69 and thumbwheel 68 to indicate which key is being actuated. Moss provides the control functions via a control panel 13 not located on the windshield.

The admitted prior art of Appellant's figure 4 shows a typical handset of a conventional mobile telephone equipment.

Moss does not disclose that the display can be for displaying communications information and telephone push buttons of a mobile telephone equipment. The Examiner states that "[t]he prior art set forth by applicant shows all the claimed structure needed for a mobile telephone" (EA3). While Appellant's figure 4 shows only a handset, there appears to be no disagreement that it would have been obvious for Moss to display any kind of control panel, including mobile telephone equipment communications information and telephone push buttons.

Moss does not disclose or suggest "a transparent touch panel formed on the front windshield in a pattern corresponding to the displayed telephone push buttons." The Examiner finds that "Ellis had suggested (col. 2, lines 42-46) that light could pass through a programmable keyboard with actuating key means" (EA3). The Examiner concludes that "[o]ne of ordinary skill in the art having Ellis would readily find it obvious that the actuating keys in Moss could be made part of the head-up display" (EA3).

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Appellant argues that Ellis "fails to teach or suggest the placement of the programmable keyboard on the front windshield of a car" (Br11). Appellant further argues that the keyboard in Ellis has three non-transparent area for selecting which liquid crystal member 7, 8, or 9 provides the labeling for the transparent keyboard and that these non-transparent areas "would be dangerous if placed on the front windshield of a car" (Br11). Appellant still further argues that there would have been no motivation to combine the teachings of the applied prior art in the manner contemplated by the Examiner (Br12-13).

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We agree with Appellant that there is no motivation in Ellis to provide a transparent touch panel for a head-up display. Ellis is not in the environment of head-up displays and the only apparent reason for combining Ellis with Moss is by use of Appellant's disclosure. Moss does not teach or suggest that the head-up display should be overlaid on a transparent touch panel. The Examiner has failed to establish a prima facie case of obviousness. The rejection of claims 1-7 is reversed.

REVERSED

JAMES D. THOMAS)	
Administrative	Patent Judge)
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)	
)	
)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative	Patent Judge)
)	AND
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